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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

IP LEARN, LLC,  
Plaintiff,  
v.  
SABA SOFTWARE INC.; and DOES 1-10,  
Defendant.

No. C 02-02634 JW

**SABA SOFTWARE, INC.'S  
MOTION FOR SUMMARY  
JUDGMENT OF NON-  
INFRINGEMENT AND  
INVALIDITY RE: THE '486  
FAMILY OF PATENTS**

Date: June 9, 2003  
Time: 9:00 a.m.  
Judge: Hon. James Ware  
Courtroom: 8, 4th Floor

TO ALL PARTIES AND THEIR COUNSEL OF RECORD:

PLEASE TAKE NOTICE that, pursuant to the Court's March 21, 2003 Order Granting Defendant Saba Software Inc.'s Miscellaneous Administrative Request To Modify Summary Judgment And Claim Construction Schedule, on June 9, 2003, at 9:00 a.m. before the Honorable James Ware, Saba Software, Inc. will, and hereby does, move this Court for summary judgment of non-infringement and invalidity of U.S. Patent Nos. 5,779,486, 5,934,909, and 6,118,973.

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## CLAIM CHARTS

<b>'486 Asserted Claims</b>	<b>1</b>	<b>2</b>	<b>54</b>	<b>55</b>
<i>Dependent On</i>		1		50, 53
"analysis rules, subject specific"	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
"complexity-hierarchy"				
"prior-to-latest"	<b>X</b>	<b>X</b>		
"questions from more than one line-item"				
"relationship rules"				

<b>'909 Asserted Claims</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>11</b>	<b>12</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>29</b>
<i>Dependent On</i>		1	1	1, 4	1	1		21		23	
"analysis rules, subject specific"		<b>X</b>									<b>X</b>
"complexity-hierarchy"					<b>X</b>		<b>X</b>	<b>X</b>			
"prior-to-latest"	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>		<b>X</b>	
"questions from more than one line-item"											
"relationship rules"				<b>X</b>					<b>X</b>	<b>X</b>	

<b>'973 Asserted Claims</b>	<b>1</b>	<b>2</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>16</b>	<b>19</b>	<b>20</b>	<b>23</b>	<b>24</b>	<b>25</b>
<i>Dependent On</i>		1	1	1	1	1, 11	1					
"analysis rules, subject specific"		<b>X</b>								<b>X</b>		
"complexity-hierarchy"			<b>X</b>									
"prior-to-latest"	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				<b>X</b>	
"questions from more than one line-item"									<b>X</b>			<b>X</b>
"relationship rules"				<b>X</b>				<b>X</b>				

## INTRODUCTION

Plaintiff IP Learn, LLC (“IP Learn”) has sued Saba Software, Inc. (“Saba”) under five patents asserting over 70 different claims. In this motion, Saba seeks summary judgment that it does not infringe three of those patents, U.S. Patent Nos. 5,779,486 (the “’486 patent”), 5,934,909 (the “’909 patent”), and 6,118,973 (the “’973 patent”) (collectively, the “’486 family”), which all pertain to a computer-aided learning system that analyzes prior-to-latest and latest test results and generates recommendations based on that analysis. Saba does not have such a system. Saba licenses software to customers primarily for use in organizing and delivering learning content to their employees. Saba’s software allows for testing of employees, but provides only limited functionality with respect to the results. Saba’s system looks to the most-recent numeric test score and decides whether it meets the passing level, making a simple “greater than/less than” comparison. Because Saba does not perform the analysis on test results or generate the recommendations described in the claims of the ’486 family, summary judgment of non-infringement should be granted.

Additionally, all of the claims that IP Learn is asserting from the ’486 family are invalid. Two references preceded IP Learn in inventing the methods and systems described in the claims. Because there are no genuine fact issues as to whether these references qualify as prior art or anticipate the claims, summary judgment of invalidity should also be granted.

## BACKGROUND

### I. IP LEARN

IP Learn is a company founded by Peter P. Tong and Chi Fai Ho. As far as Saba is aware, IP Learn does not have any employees, make any products, or provide any services. IP Learn is in the business of licensing and enforcing the patents on which Messrs. Tong and Ho are listed as inventors. Mr. Tong, an attorney, is both an inventor *and* the prosecutor of these patents.

### II. SABA

Saba is a leading provider of learning management systems for businesses.

IP Learn accuses one of Saba’s product series, “Saba Learning,” of infringement. Saba Learning comes in two editions — ASP and Enterprise. ASP is the simpler of the two, and is

1 hosted over the Internet using servers at Saba. Enterprise edition requires an installation at the  
2 client and provides a more robust feature-set. Both editions have been released in different  
3 versions (*e.g.*, version 3.4, 4.0), each with different features. IP Learn has accused only the  
4 Enterprise edition of infringing the patents addressed by this motion, but has yet to identify which  
5 version(s) of the Enterprise edition it accuses.

6 Saba Learning is not a tool for automatically creating recommendations based on analysis  
7 of test scores, as is claimed by the '486 family of patents. It is rather a tool primarily for  
8 businesses to organize and deliver learning content to their employees. (Declaration of Jodie  
9 Kalikow in Support of Saba Software, Inc.'s Motions for Summary Judgment ("Kalikow Decl."),  
10 ¶ 3.) Using the Saba Learning system, employers first define what job classes exist at the  
11 company. Next, they determine the roles associated with a given job class. They then define  
12 what skills (called "competencies") are necessary to perform those roles. (*Id.* ¶¶ 5-6.) Employers  
13 may also set numeric "proficiency" levels for the competencies for the various job classes (*e.g.*, a  
14 Saba customer may set the levels at 1 through 5). (*Id.* ¶ 7.) Employers may have an employee  
15 self-assess his or her own proficiency level, or they can have the employee's supervisor grade the  
16 employee's proficiency level. Alternatively, they can designate catalogue offerings, which may  
17 include a classroom or web-based course (which, in turn, may or may not include a test) as  
18 capable of providing an employee with a given proficiency level. (*Id.* ¶ 8-9.) Saba Learning  
19 assists in the delivery of catalogue offerings to employees by making it easy for employees to  
20 determine their current competency level, what competency level they are expected to reach, and  
21 what catalogue offerings are available to reach the target proficiency level for that employee's job  
22 class.

23 In most cases, Saba's customers allow employees to achieve proficiency levels by  
24 attending a course or by reviewing on-line content. (*Id.* ¶ 11.) However, a Saba customer may  
25 also create a test that must be passed in order for the employee to reach a level of proficiency in a  
26 competency, and may set a numeric level constituting a passing score for such a test. (*Id.* ¶ 12.)  
27 Saba allows for one and only one score to be returned per catalogue offering for purposes of  
28 deciding whether the employee has passed. If the employee's score reaches the passing level, the

employee's file is updated to reflect that he or she has reached the competency level associated with the course. (*Id.* ¶ 12.) There is not much more to Saba's analysis of test scores than this. There are no recommendations generated on the basis of prior test scores.

### III. THE PRESENT ACTION AND RELATED ACTIONS

On May 31, 2002, IP Learn filed the present action against Saba, alleging infringement of the '486 patent, the '909 patent, the '973 patent, and U.S. Patent No. 6,126,448 (the "'448 patent"). (Declaration of David E. Melaugh in Support of Saba Software Inc.'s Motions for Summary Judgment ("Melaugh Decl."), Exs. A, B, C, D, respectively.) On June 7, 2002, IP Learn amended its complaint, adding U.S. Patent No. 6,398,556 (the "'556 patent"), which had just issued. (Melaugh Decl., Ex. E) (these five patents are hereinafter collectively referred to as the "patents in suit"). This motion concerns the '486 patent and its two related patents, the '909 patent and the '973 patent.<sup>1</sup> From the '486 family, IP Learn has asserted the following claims against Saba — '486: Claims 1, 2, 54, 55; '909: Claims 1, 2, 4, 8, 11, 12, 21, 22, 23, 24, 29; and '973: Claims 1, 2, 9, 10, 11, 12, 16, 19, 20, 23, 24, 25 (the "Asserted Claims"). Saba has provided a chart identifying which Asserted Claims include which terms at issue in this motion. *Supra* at p. (iii).

IP Learn has filed four other separate actions in the Northern District of California alleging infringement of the patents in suit, each of which was assigned to separate judges. *See* N.D. Cal. Cases Nos. 02-1977-JSW, 02-2632-MJJ, 02-2636-DLJ, and 02-4114-PJH.

### ARGUMENT

#### I. THE COURT SHOULD PRECLUDE IP LEARN FROM INTRODUCING INFRINGEMENT ARGUMENTS NOT SUPPORTED BY ITS COURT-ORDERED PRELIMINARY INFRINGEMENT CONTENTIONS.

In summary judgment proceedings, once the moving party has made an initial showing that "there is no genuine issue as to any material fact," the non-moving party must affirmatively respond with *specific facts* necessitating trial on that issue, and cannot rest on the pleadings or simply assert an ability to discredit the movant's evidence at trial. *See Celotex Corp. v. Catrett*,

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<sup>1</sup> The '448 and '556 patents are addressed in Saba Software, Inc.'s Motion For Summary Judgment Of Non-Infringement Re: The '448 And '556 Patents, filed herewith.



1 477 U.S. 317, 323-32 (1986); *Arthur A. Collins, Inc. v. N. Telecom Ltd.*, 216 F.3d 1042, 1046  
2 (Fed. Cir. 2000).

3 Here, IP Learn should not be permitted to respond to this motion with new arguments as  
4 to where an infringing element may be found in Saba's products that were not included in its  
5 infringement contentions. Patent Local Rule 3-1(c) requires the plaintiff to produce "preliminary  
6 infringement contentions" ("PICs") that identify "specifically where each element of each  
7 asserted claim is found within" the accused product, and Local Rule 3-7 prevents the plaintiff  
8 from modifying the contentions absent a court order. Saba voluntarily produced thousands of  
9 pages of confidential technical documentation shortly after the suit was filed, months in advance  
10 of the due date for its contentions. (Melaugh Decl., ¶ 7.) Despite this, IP Learn's first PICs were  
11 in gross violation of the Local Rules — in many instances they simply parroted back the claim  
12 language.

13 Saba subsequently secured a court order compelling IP Learn to present competent PICs.  
14 IP Learn produced revised PICs on April 4, 2003, two weeks after this Court's March 21 claim  
15 construction order. (Melaugh Decl., Exs. F (Appendix A to Supplemental Disclosure of Asserted  
16 Claims and Preliminary Infringement Contentions ("PICs Chart")) & G (Order re: Claims  
17 Construction, entered March 21, 2003).) Saba's summary judgment deadline of May 5 was set  
18 one month after IP Learn's PICs were due so that Saba could use the PICs as the primary basis for  
19 its summary judgment motions. As to, *inter alia*, the key elements discussed below, IP Learn's  
20 PICs do not disclose a viable basis for direct infringement, and the PICs never disclose any  
21 information regarding indirect infringement or infringement under the doctrine of equivalents.

22 Saba has relied upon IP Learn's revised PICs in drafting its summary judgment motions,  
23 and IP Learn, which had 10 months to develop its infringement arguments in this case before its  
24 PICs were due, should not now be allowed to oppose summary judgment with novel theories of  
25 where infringing elements can be found in Saba's products that it did not disclose in its PICs  
26 produced on April 4.

1           **II.       SABA DOES NOT INFRINGE ANY OF THE ASSERTED CLAIMS.**

2           This Court has already issued a claim construction order construing four terms from the  
3           claims of the '486 family. (Melaugh Decl., Ex. G.) IP Learn claims that three additional terms  
4           require construction: relationship rules, pre-requisite rules, and inference engine. (Melaugh  
5           Decl., Ex. H (IP Learn's Proposed Terms for Construction).)<sup>2</sup> As discussed in more detail below,  
6           for the purposes of this motion, Saba stipulates to IP Learn's proposed construction for these  
7           terms.<sup>3</sup>

8                           **A.       Saba Learning Does Not Perform The Step Of "analyzing the student's  
9                           prior-to-the-latest . . . test results using the set of [analysis] rules to  
                         generate a recommendation."**

10          **Claims affected:       '486 — 1, 2; '909 — 1, 2, 4, 8, 11, 12; '973 — 1, 2, 9, 10, 11, 12, 16, 24**

11           Sixteen of the Asserted Claims include the step of "analyzing the student's prior-to-the-  
12           latest . . . test results using the set of [analysis] rules to generate a recommendation." This court  
13           construed "analysis rules" as follows:

14                           In an educational system which assesses a student's level of  
15                           understanding of a subject, "analysis rules" is a set of rules used in  
                         the assessment.

16           (Melaugh Decl., Ex. G at 7:15-17.) This Court construed "recommendation generator" as  
17           follows:

18                           In an educational system which assesses a student's level of  
19                           understanding of a subject, the "recommendation generator" is a  
20                           system and method that produces a recommendation using the  
                         analysis rules.

21           (*Id.* at 7:18-19.)

22           In its PICs, IP Learn quotes from pages of Saba Learning documentation that demonstrate  
23           only that in Saba Learning: (i) test results are recorded, and a user can view the results of

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24                           <sup>2</sup> IP Learn initially claimed that a fourth term — complexity-hierarchy — required  
25                           construction, but later proposed "complexity-hierarchy" as the construction for complexity-  
                         hierarchy. (Melaugh Decl., Ex. I (IP Learn's Proposed Claim Constructions).)

26                           <sup>3</sup> Saba has identified other terms that merit construction by this Court in the applicable  
27                           Patent Local Rules disclosures. For the purposes of this motion, however, Saba does not believe  
28                           the Court need construe any terms other than those addressed in the Court's Order re: Claims  
                         Construction. (Melaugh Decl., Ex. G.)

multiple tests on the “View Results” screen; (ii) the system identifies competency gaps; and (iii) the system records when a user has completed a course. (PICs Chart, Melaugh Decl. Ex. F, at 4.) Neither constitute a recommendation based on the application of a set of analysis rules to a user’s prior-to-latest test results.

Saba Learning does not apply analysis rules to a user’s prior-to-latest test results to generate a recommendation. (Kalikow Decl., ¶ 14.) In the Saba Learning system, catalogue offerings can contain tests, but Saba Learning only has the capability of checking the latest test score and deciding whether it is a passing score or not. (*Id.* ¶ 12.) Saba Learning never looks at the prior-to-latest test result to make a determination of whether the student has passed, let alone as a basis to make a recommendation. (*Id.* ¶ 14.) In essence, all that the Saba system cares about is whether the user passes the present test, *i.e.*, whether the present numeric total score meets the minimum pass requirement for the catalogue offering.<sup>4</sup> (*Id.* ¶ 12.) If the minimum is met, the user is credited with the proficiency level associated with the offering; if not, the user remains at his or her present proficiency level. (*Id.*) There is no reference to “prior-to-the-latest” test results to generate a recommendation.

Moreover, Saba Learning does not “generate recommendations” based on “analysis rules.” According to the Court’s claim construction, the recommendations need to be generated using the analysis rules, *i.e.*, the rules *used in the assessment*. In Saba Learning, the assessment is simply a “pass/no pass” comparison of the user’s latest numeric test score versus the numeric passing score. This numeric comparison is not a rule used to produce a recommendation. It is true that if the user does not have the required competency level for a job class, the user is shown the catalogue offerings available to reach the target proficiency level for that employee’s job class. However, these catalogue offerings are not produced by rules “used in the assessment.” Rather, the employer manually associates these catalogue offerings with the competency level at the set up stage of the system. (Kalikow Decl. ¶¶ 9-12.)

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<sup>4</sup> In some versions of the system, a learning offering is capable of being divided into subparts, called assignable units or “AUs,” according to standard industry conventions. In such implementations, the results of the different subparts within a test are rolled up into one total score. (Kalikow Decl., ¶ 13.)

**B. Saba Learning Does Not Rely Upon “analysis rules, with a plurality of the rules being subject-specific.”**

**Claims affected:** '486 — 1, 2, 54, 55; '909 — 2, 29; '973 — 2, 23

Eight of the Asserted Claims include a limitation that a plurality of the “analysis rules” applied to test results be “subject-specific.”

IP Learn’s PICs point out that different tests can have different passing scores, and that sections of a test can each be weighted differently. (Melaugh Decl., Ex. F (PICs Chart) at 2-3.)

IP Learn’s PICs also cite to the “certification” feature of the Saba Learning system, which allows a customer to group courses together. (*Id.*; *see also* Kalikow Decl., ¶ 15-16.) The employee must complete all of the courses within the certification to become “certified.”

These features do not equate with applying “subject-specific” analysis rules to generate a recommendation. At best IP Learn’s PICs demonstrate only that Saba Learning is capable of scoring tests in different ways (*e.g.*, an employer can set “70” as passing on a test, and give double points on a particular section). The Saba Learning system never applies “subject-specific” analysis rules to a user’s test results. A user passes a test or does not pass a test based simply on a numeric total score. (Kalikow Decl., ¶ 12.) There is nothing specific to a subject in this determination.

**C. Saba Learning Does Not Rely Upon “relationship rules, which determine the relationship between at least two line-items” For “performing inferences on the one or more scores based on the set of relationship rules to generate a recommendation.”**

**Claims affected:** '909 — 8, 23; '973 — 10, 19

Four of the Asserted Claims include the limitation that “relationship rules” that apply to “line-items” are used to “perform inferences” on scores to “generate a recommendation.” This Court construed “line-item” as follows:

In an educational system which assesses a student’s level of understanding of a subject and in which the subject is divided into a hierarchy of complexity, a “line item” is a subdivision of the subject, with at least one line item being more difficult than another line item.

(Melaugh Decl., Ex. G at 7:12-15.) IP Learn asserts that the “relationship rules” should be construed as “a subset of analysis rules that define relationships” (Melaugh Decl., Ex. I at 2 (IP Learn’s Proposed Claim Constructions).) For purposes of this motion, Saba stipulates to that construction.

IP Learn’s PICs appear to assert that the “certifications” feature of the Saba Learning system performs this claimed step of utilizing relationship rules that relate line-items to make inferences to generate recommendations. (Melaugh Decl., Ex. F (PICs Chart) at 19-20.) The quotations provided by IP Learn, however, demonstrate only that a particular certification can be achieved in a variety of ways — *e.g.*, by participating in a live course or by reviewing certain learning materials. (*Id.*) This has nothing to do with relationship rules, inferences, line-items, or recommendations. Moreover, there is no showing that certifications are “divided into a hierarchy of complexity” as required by the Court’s claim construction.

**D. Saba Learning Does Not Apply A “complexity-hierarchy to . . . overall scores to generate a recommendation.”**

**Claims affected: ’909 — 11, 21; ’973 — 9**

Three of the Asserted Claims contain a limitation that the system include a “complexity hierarchy to . . . overall scores to generate a recommendation.” IP Learn argues that “complexity-hierarchy” should be construed as “complexity-hierarchy,” and that no further construction is necessary. (Melaugh Decl., Ex. I at 2.) For the purposes of this motion, Saba so stipulates.

IP Learn claims that Saba’s certification feature applies a complexity-hierarchy to overall scores to generate a recommendation. (Melaugh Decl., Ex. F (PICs Chart) at 22-23.) It does not. The catalogue offerings necessary to complete a certification can be arranged in “paths,” but that method of organization bears no relation to their “complexity.” (Kalikow Decl. ¶ 16.) Moreover, the organizational “path” structure of the certifications is never “applied” to “overall scores.” If a Saba customer were to decide to use tests as part of the catalogue offerings that make up a certification, all Saba Learning focuses on is whether the employee has passed each of the offerings. (*Id.* ¶ 17.) If each constituent offering is passed, the certification is granted. (*Id.*)

1 There is no complexity-hierarchy applied to overall scores, and certainly no recommendation  
 2 generated through such a process.

3  
 4 **E. Saba Learning Does Not Use A “test including questions from more than one line-item.”**

5 **Claims affected: ’973 — 20, 25**

6 Two of the Asserted Claims require the use of a “test including questions from more than  
 7 one line-item.”

8 IP Learn’s PICs do not divulge what element of the Saba Learning system IP Learn  
 9 alleges corresponds to a “line-item.” This is because IP Learn has chosen, in its PICs, not to  
 10 address the first paragraph of every claim. (*See, e.g.*, Melaugh Decl., Ex. F (PICs Chart) at  
 11 43-44.)

12 One might discern what IP Learn believes corresponds to a line-item from Claim 54 of the  
 13 ’486 patent. (*Id.* at 5-10.) The last element of that claim involves “suggesting to the student the  
 14 line-item that the student should improve on.” (*Id.* at 10.) From that contention, it appears that IP  
 15 Learn alleges that competencies and certifications correspond to “line-items.” (*Id.*) If that is so,  
 16 Saba Learning does not infringe Claims 20 and 25 of the ’973 patent, as no test administered by  
 17 the system contains questions from more than one competency or certification and hence no test  
 18 includes “questions from more than one line-item.” (Kalikow Decl., ¶ 13.)

19 **III. THE ASSERTED CLAIMS ARE INVALID.**

20 A prior art reference anticipates a patent claim if each element of the claim is found, either  
 21 expressly or under the principles of inherency, in the prior art reference. *See Atlas Powder Co. v.*  
 22 *Ireco Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999). Saba bears the burden of proving invalidity by  
 23 clear and convincing evidence. That burden is more easily carried where, as here, the examiner  
 24 did not consider the prior art at issue. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044,  
 25 1050 (Fed. Cir. 1988).<sup>5</sup>

26 <sup>5</sup> IP Learn submitted a few pages pertaining to SuccessMaker to the patent examiner, but  
 27 failed to submit the manuals reflecting the functionality of the product. (*Compare* Melaugh  
 28 Decl., Ex. J (what the inventors submitted to the examiner) *with* Declaration of Richard Ravaglia  
 In Support of Saba’s Motion for Summary Judgment, Exs. A & B (manuals that were publicly  
 available at the time).)

**A. The Earliest Filing Date of the '486 Family and Conception Date of the Asserted Claims**

The filing date for the earliest of the three patents in the '486 family is March 19, 1996. (Melaugh Decl., Ex. A.) In discovery in a related case, IP Learn has disclosed that the earliest conception date of the asserted claims is March 11, 1996. (Melaugh Decl., Ex. K (Plaintiff IP Learn LLC's Objections and Supplemental and Consolidated Responses to Defendant SmartForce Inc.'s First Set of Interrogatories), Response No. 1.)

**B. The Hirmanpour and SuccessMaker References**

**1. The Hirmanpour Thesis**

In 1980, Iraj Hirmanpour, a doctoral candidate at Florida Atlantic University, published his thesis entitled "A Computerized Model For Placement And Diagnostic Testing In College Remedial Mathematics" ("Hirmanpour"), which sets forth a computerized method of conducting diagnostic testing using "learning hierarchies." (Declaration of Iraj Hirmanpour ("Hirmanpour Decl."), Ex. A at SA 06661, 06671-85.) Hirmanpour provided that subjects being tested be organized according to a hierarchy of main topics, subordinate topics, and sub-subtopics. The thesis provides the example of an introductory algebra course broken down into a hierarchy of 10 main topics (*e.g.*, Integers and Rational Numbers), subtopics (*e.g.*, Integers and Exponents) and sub-subtopics (*e.g.*, Use Exponents in Multiplying) and organized into a hierarchy. (*Id.* at SA 06671-84.) The software was designed to administer an initial test to a student, then analyze the results to identify the subordinate tasks which the student had not yet mastered. It then administered a second test focusing only on the tasks which the first test showed that the student had not yet mastered. Based on the test results, it generated a report on the student's performance and identified areas in which remediation was needed. (*Id.* at SA 06684-85.)

Hirmanpour, which was published in 1980, qualifies as prior art to the Asserted Claims under Sections 102(a) and (g). (Hirmanpour Decl., ¶¶ 1-3; 35 U.S.C. § 102(a) (reference qualifies as prior art if described in a printed publication in this or a foreign country before the date of invention by the applicant); 35 U.S.C. § 102(g) (reference qualifies as prior art if before



1 the date of invention by the patent applicant, the reference was invented by another who did not  
2 abandon, suppress, or conceal it).)

## 3 **2. The SuccessMaker Product**

4 Computer Curriculum Corporation offered its “SuccessMaker” product for sale at least as  
5 early as 1994. (Declaration of Raymond Ravaglia in Support of Saba Software, Inc.’s Motion for  
6 Summary Judgment Re: the ’486 Family of Patents (“Ravaglia Decl.”), ¶¶ 3-5 & Exs. A  
7 (SuccessMaker Instructional Management Handbook (1993)) & B (SuccessMaker Math Concepts  
8 and Skills, Teacher’s Handbook (1993)).) The SuccessMaker software systematically divided  
9 subjects (called “skills”) into line-items (called “strands”), with some “strands” more difficult  
10 than other “strands.” (Ravaglia Decl., Ex. A at SA 06242, 06248-49). It kept track of a student’s  
11 performance on tests, recorded the test results, and recommended further exercises in weak areas  
12 based on the test results. (*Id.* at SA 06239, 06245-46 (students assessed in multiple phases), 6249  
13 (student assessed over 10 sessions)). At the end of a session, the system updated the student’s  
14 performance history so that reports could be generated. (*Id.* at SA 06240.) The system was also  
15 capable of weighting the latest test results more highly than previous tests. Students were given  
16 cumulative review tests and if the student could not pass a lesson in a review test after the student  
17 had already mastered it earlier, then the student’s pass notation on that lesson was reversed. (*Id.*  
18 at SA 06248.)

19 The SuccessMaker product qualifies as prior art under 102(a), (b), and (g). (*See* Ravaglia  
20 Decl. ¶¶ 3-5; 35 U.S.C. §§102(a), (b) (reference qualifies as prior art if “on sale in this country  
21 more than one year prior to the date of the application for patent in the United States”), & (g).)

## 22 **3. The Hirmanpour And SuccessMaker References Invalidate The** 23 **Asserted Claims.**

24 The evidence clearly and convincingly establishes that both Hirmanpour and  
25 SuccessMaker invented a system anticipating the claims before IP Learn’s earliest invention date  
26 of March 11, 1996 and published and/or sold the systems prior to March 19, 1995. Saba served  
27 IP Learn with preliminary invalidity contentions addressing the SuccessMaker reference on  
28 January 10, 2003. (Melaugh Decl., Ex. M (Saba’s Preliminary Invalidity Contentions And



Related Document Disclosure & Table 1). As to the Hirmanpour reference, Saba served draft invalidity contentions on IP Learn on March 18, 2003, and in an unopposed motion filed herewith, seeks leave of this Court to supplement its preliminary invalidity contentions with the Hirmanpour contentions. (Declaration of David E. Melaugh in Support of Saba Software, Inc.’s Motion to Amend Preliminary Invalidity Contentions Pursuant to Local Rule 3-7, ¶¶ 3-4 & Ex. C filed therewith.)

**C. The Court Should Preclude IP Learn From Introducing Arguments Not Disclosed In Its Responses to Saba’s Interrogatories Seeking IP Learn’s “Validity” Contentions.**

On March 18, 2003, Saba served interrogatories on IP Learn seeking the basis for IP Learn’s belief that its patents were valid in light of the prior art and preliminary invalidity contentions disclosed by Saba. IP Learn’s response was remarkably bare — as to every element of the Asserted Claims, IP Learn stated only, “The cited material does not teach, suggest or render obvious [rote quotation from claim language.]” (Melaugh Decl., Ex. N (Plaintiff IP Learn, LLC’s Responses to Saba Software, Inc.’s Second Set of Interrogatories), Response Nos. 2, 4 & Table 1.) IP Learn should be precluded from introducing argument not disclosed in those responses.

**D. The Hirmanpour And SuccessMaker References Invalidate The Asserted Claims Of The ’486 Patent.**

**1. Claim 1 Of The ’486 Patent**

Claim 1 contains the following elements:

- (1) A score generator for accessing the student’s prior-to-latest and latest test results;
- (2) A recommendation generator coupled to the score generator for:
  - (a) accessing analysis rules (a plurality being subject-specific) and
  - (b) analyzing the test results to generate a recommendation.

Hirmanpour contains each of these elements. First, it contains a score generator that accesses both the first and second test results. (Hirmanpour Decl., Ex. A, at SA 06742 (the “program [REPORT1] will give test results on test one for a specific student in the file”), 06746 (the “program [REPORT2] will give student’s result of test two”); *see also id.* at SA 06684-

06688, 06706, 06712.) Second, the program includes analysis rules which are applied to the prior-to-latest and latest results:

Test one examines the student's mastery of each of the ten tasks by asking five questions relating to each task, and mastery of a task is determined by requiring at least four correct answers. . . . Test two further examines the student on tasks in which a lack of mastery was indicated in test one. The examination is performed by measuring the student's mastery of subordinate tasks, using the same number of questions and the same performance criterion as test one and identifies those prerequisite skills that the student lacks.

(*Id.* at SA 06684.) Third, a plurality of the rules used in the analysis were subject-specific — in this case, pertaining to algebra. (*Id.* at SA 06671.) Finally, the program sends the student a recommendation based on the test results. (*Id.* at SA 06746 (“STUDENT NEEDS REMEDIATION ON THE FOLLOWING . . . ”); *see also* SA 06684-06688.)

The SuccessMaker product also contained all of the elements of claim 1. It included a score generator that accesses the student's prior-to-the-latest and latest test results. (Ravaglia Decl., Ex. A, at SA 06239-40 (with each session, system updates student's performance history), 06242, 06245-46 (students assessed in multiple phases); 06249 (student assessed over 10 sessions), 06297 (showing “Data From Last Session” and “cumulative” scores); *see also* Ravaglia Decl., Ex. B at SA 06429-32 (overall scores are adjusted to reflect the student's combined prior-to-latest and latest test results).)

The SuccessMaker system also makes recommendations using *subject-specific* analysis rules. (*Id.* at SA 06405 (“[d]uring the student's work in Math Concepts and Skills, the system evaluates the student's answers, maintains records, and selects exercises. The system uses decision-making algorithms that are specifically designed for the subject area”), 06408, 06421-23, 06427.)

Finally, the SuccessMaker software analyzes the student's results by examining the scores to generate recommendations. (Ravaglia Decl., Ex. A, at SA 06249 (“[a]lthough a student receives instruction in a mixed presentation of exercises from different strands, the system tracks student responses by strand, so the system knows the student's level in each skill area. . . . This ability to track progress strand by strand is what enables the system to weight the skill strands”).)

SuccessMaker identifies particular areas of weakness and recommends additional work in that area. (*Id.* (the “system uses a fixed proportion as a starting point for weighting strands. The system then modifies the proportion to meet the needs of each individual student. . . . The system will automatically increase the amount of instructional time spent on those skills in which the student is weakest”); *see also* Ravaglia Decl., Ex. B, at SA 06405 (“the system evaluates the student’s answers, maintains records, and selects exercises”), SA 06408, 06422, 06422-23.) The system also prints out individualized worksheets focusing on the problem areas of the student. (*Id.* at SA 06427.) SuccessMaker recommends a learning path through the materials based on the student’s past performance. (*Id.* at SA 06421 (a “student’s progress is determined by his or her performance according to a set of rules called ‘motion algorithms,’ which evaluate the student’s performance on each exercise. The system uses this evaluation to select the student’s next exercise or tutorial”); *see also id.* at SA 06422, Table 2 (listing possible recommendations after applying the analysis rules).)

## 2. Claim 2 Of The ’486 Patent

Claim 2 adds the limitation that the system further comprises a student’s-result-storage medium coupled to the score generator for storing the student’s test results; and an analysis-rule-storage medium coupled to the recommendation generator for storing the set of analysis rules.

Hirmanpour anticipates claim 2 because it provides for results storage. (Hirmanpour Decl., Ex. A, at SA 06686 (“[t]wo files are created which are initially blank, and they will contain a record of each student’s performance on test one and test two.”); *see also id.* at SA 06701-02; 06687-89, 06742, 06746-47, 06758.) Hirmanpour also embodied the additional element of storing the analysis rules electronically. (*Id.* at SA 06742-57 (computer code for REPORT1 contains the rules for determining whether student passed a section and code for REPORT2 rules for determining areas in which student needs further remediation); *see also id.* at SA 06684-88, 06700-02, 06758.)

SuccessMaker also had the ability to store student’s test results (Ravaglia Decl., Ex. A, at SA 06239, 06242, 06259, 06295-97), and store the analysis rules (*Id.* at SA 06249-50; *see also* Ravaglia Decl., Ex. B, at SA 06405, 06421-23).

1                                   **3.       Claim 54 Of The '486 Patent**

2           Claim 54 adds the limitations that: (i) the system is divided into line-items with at least  
3   one line-item more difficult than another; and (ii) the recommendation includes suggesting to the  
4   student which line-item that the student should improve upon.

5           Hirmanpour anticipates claim 54, first, because the subject is divided into “learning  
6   hierarchies,” with enumerated subordinate areas (*i.e.*, line-items) of varying difficulties, and  
7   second, because the recommendation that is generated relates specifically to the subordinate task  
8   (*i.e.*, the line-item) that needs further work. (Hirmanpour Decl., Ex. A, at SA 06684-06688,  
9   06706, 06712, 06746-06747, 06758.)

10          SuccessMaker also meets these added limitations. The SuccessMaker subjects are divided  
11   into strands and organized according to difficulty. (Ravaglia Decl., Ex. A, at SA 06242 (in strand  
12   courses, content is divided into separate skill areas, and a graduated sequence of exercises in one  
13   skill area are arranged in order of difficulty), 06248 (courses divided unto subcontent areas,  
14   which are arranged in increasing difficulty), 06249-50, 06297; *see also* Ravaglia Decl., Ex. B, at  
15   SA 06405, 06408, 06410, 06429-30.) As set forth above under claim 1, SuccessMaker also  
16   directs the student to the particular strand or sub-part of a strand that is in need of improvement.

17                                   **4.       Claim 55 Of The '486 Patent**

18          The remaining asserted claim from the '486 patent — claim 55 — includes elements  
19   already discussed above that are all anticipated by both Hirmanpour and SuccessMaker.

20                                   **E.       The Hirmanpour And SuccessMaker References Invalidate The**  
21                                   **Asserted Claims Of The '909 Patent.**

22                                   **1.       Claims 1 And 2 Of The '909 Patent**

23          Claims 1 and 2 of the '909 patent contain the same elements as Claims 1 and 2 of the '486  
24   patent, excepting that they are method claims and make clear that the learning system is  
25   “computer-aided.” Because both Hirmanpour and SuccessMaker clearly disclose a method that is  
26   “computer-aided,” these elements are also met.

## 2. Claim 4 Of The '909 Patent

Claim 4 of the '909 patent depends from claim 1, but adds the limitation of calculating one or more overall scores based on the accessed “test results for generating a recommendation.” Hirmanpour provides for overall scores to be calculated based on the same test results used to provide a recommendation. (Hirmanpour Decl., Ex. A, at SA 06742, 06746-47; *see also id.* at SA 06684-88, 06706, 06712, and 06758.) As discussed under claim 1 of the '486 patent, SuccessMaker also provides for overall scores to be calculated based on the test results used for making recommendations. (Ravaglia Decl., Ex. A, at SA 06239-40, 06242, 06245-46 (students assessed in multiple phases); 06249 (student assessed over 10 sessions), 06297 (showing “Data From Last Session” and “cumulative” scores); *see also* Ravaglia Decl., Ex. B, at SA 06429-32 (overall scores for each strand adjusted after each session).)

### 3. Claim 8 Of The '909 Patent

Claim 8 of the '909 patent depends from claim 4, but adds the limitation that relationship rules are used to perform inferences on the scores to generate a recommendation.

Hirmanpour describes a system whereby the subject matter is analyzed into “subordinate tasks with stated performance objectives.” (Hirmanpour Decl., Ex. A, at SA 06671.) “A numbering system for these tasks was designed to identify interrelationships of skills or prerequisite skills.” (*Id.*) “This numbering system is used in the computer programs to relate test questions to tasks and sub-tasks.” (*Id.*) The program applies these rules to identify “those prerequisite skills that the student lacks.” (*Id.* at SA 06684; *see also* task hierarchy at SA 06670-06683 and as applied in test two at SA 06767-806; 06661, 06664-65, and 06685-88.)

Moreover, SuccessMaker accesses rules that determine the relationships among the different strands in a subject and the different skills within various strands. (Ravaglia Decl., Ex. B, at SA 06405, 06407 (“[c]oncepts and skills in elementary mathematics can be identified and developed in a well-defined hierarchy,” “skills are linearly ordered within each strand and are assigned approximate grade-level equivalents. . . . Each skill objective may have up to three prerequisite skills that can be presented for review when the student is having difficulty with a particular skill”), 06410-12; *see also id.* at SA 06407 (discussing prerequisite skills), 06422

(same).) Relationship rules are also used to decide which exercise to show the student next. (*Id.* at SA 06421 (student's progress determined by performance according to set of 'motion algorithms').)

#### 4. Claim 11 Of The '909 Patent

Claim 11 of the '909 patent depends from claim 1, but adds the limitations that the subject is divided into line items of varying difficulties and that prerequisite rules are used to establish a complexity hierarchy.

As described above in the section on claim 8 of the '909 patent, both Hirmanpour and SuccessMaker teach using prerequisite rules to organize the subordinate tasks and identify tasks where the student needed remediation.

#### 5. Claim 12 Of The '909 Patent

Claim 12 of the '909 patent depends from claim 1, but adds the limitation that, based on the recommendation, a report is generated. Hirmanpour provides for a report, which includes a recommendation. (Hirmanpour Decl., Ex. A, at SA 06746.) SuccessMaker also provides for generating reports based on the recommendation. (Ravaglia Decl., Ex. A at SA 6300-05; Ex. B. at SA 06428-32.)

#### 6. The Remaining Claims Of The '909 Patent

The remaining asserted claims from the '909 patent (claims 21, 22, 23, 24, and 29) include elements already discussed above and are all anticipated by both Hirmanpour and SuccessMaker.

#### F. The Hirmanpour And SuccessMaker References Invalidate The Asserted Claims Of The '973 Patent.

The '973 patent includes similar claims to those found in the '909 patent, but adds the limitation that the analyzing computing device can access a network and transmit the recommendation to a second computing device.

Hirmanpour discloses that the student will be administered the test on a computer "terminal." (Hirmanpour Decl., Ex. A, at SA 06650.) It also states that the computer system proposed in the study could be "modified easily to work on microsystems." (*Id.* at SA 06697.) This suggests that Hirmanpour could function on a network with more than one computer.

1           Moreover, the concept of networking two computers was well known in the art at least by  
2   1995. It would have been obvious to one skilled in the art by 1995 that the 1980 Hirmanpour  
3   software could be run on computers on a network. *See, e.g., In re Raynes*, 7 F.3d 1037, 1040  
4   (Fed. Cir. 1993 (taking judicial notice of ubiquitous technology in the course of obviousness  
5   analysis)).

6           In fact, the SuccessMaker product was designed to be used on a network. (Ravaglia Decl.,  
7   Ex. A, at SA 06238 (“[y]our learning environment may have a computer connecting many  
8   microcomputers, or there may be several microcomputers in a local area network with a central  
9   file server”); 06239-40 (system administrator performs network backups), 06241 (several  
10   managers may work in remote sites using MICROHOST system), 06243 (learning stations  
11   distributed throughout school); 06252 (systems may be “distributed networks that use a local area  
12   network server”), 06259 (server in administrative wing of school with networked stations in each  
13   classroom), 06288-90 (describing system that includes more than one server).)

14           SuccessMaker transmitted recommendations to a second computer in a number of ways.  
15   First, they are transmitted from the file server to the student’s learning station. (*Id.* at SA 06239-  
16   40, 06295.) Second, they are transmitted from the file server to the teacher or manager’s station  
17   when reports are generated. (*See, e.g., id.* at SA 6239; *id.* Ex. B, at SA 06428.) Third,  
18   recommendations can be transferred from the teacher’s learning station through the network to  
19   the file server (or MICROHOST) and network printer. (*Id.* Ex. A, at SA 06239.)

20           Claims 20 and 25 also include a limitation that the student have taken a test that included  
21   “questions from more than one line-item.” Both SuccessMaker and Hirmanpour provide for such  
22   tests. (*See, e.g.,* Hirmanpour Decl., Ex. A, at SA 06684-88 (first and second tests contain  
23   questions from more than one subordinate task); Ravaglia Decl., Ex. A at SA 06242, 6248  
24   (discussing “mixed presentation”).)

25           The remaining claims of the ’973 patent present the same elements as discussed above in  
26   conjunction with the claims from the ’486 and ’909 patents.

**CONCLUSION**

For the foregoing reasons, Saba respectfully requests that the Court find that Saba does not infringe any claim asserted by IP Learn from the '486 family of patents and that the asserted claims from the '486 family of patents are invalid.

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